## Encephalitis – an ambitious global endeavour.

Encephalitis is inflammation and swelling of the brain often caused by an infection or the body's immune defences. It is a neurological emergency which can cause severe disability or death but can often be treated if diagnosed promptly<sup>1</sup>.

Although exact figures are difficult to determine, in many countries the incidence is believed to be higher than motor neuron disease/amytrophic lateral sclerosis, bacterial meningitis, and multiple sclerosis<sup>2</sup>. Yet, encephalitis remains relatively neglected compared to other neurological diseases, with eight out of 10 people around the world not knowing what encephalitis is<sup>2</sup>.

The Encephalitis Society has been working to reduce this, supporting those affected by the condition, facilitating research and raising awareness, particularly through World Encephalitis Day (<a href="https://www.worldencephalitisday.org">www.worldencephalitisday.org</a>). This was launched on 22<sup>nd</sup> February 2014, and has grown annually in size and scope since then.

Since 2020 the Encephalitis Society has been in informal discussions with the World Health Organization (WHO) about ways to reduce the disease burden of encephalitis. The Society has carried out a 160-page Global Encephalitis Review and Gap Analysis<sup>3</sup>. This highlights the key factors impacting on the global burden of encephalitis, reviewed the epidemiology, incidence, morbidity, and mortality, examined surveillance, prevention, diagnosis, and treatment, and considered neurology training, and the needs of patients and families<sup>3</sup>. The Covid-19 pandemic, along with other new and emerging infections, have underscored the potential neurological impact of infectious diseases.

The Executive Board of WHO in January 2022 recommended the draft Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders<sup>4</sup> to be reviewed and endorsed by the 74<sup>th</sup> World Health Assembly. The Lancet Neurology to describe 2022 as a 'decisive year for the neurological community' with the potential for worldwide historic policy change which has the potential to impact neurological services following." <sup>5</sup>

Motivated by this, and the recent WHO roadmap to defeat meningitis by 2030<sup>6</sup>, the Encephalitis Society is announcing on this year's World Encephalitis Day a meeting in June which will see global partners and stakeholders, including the WHO, come together to discuss how to tackle encephalitis urgently in the coming years. This will involve aligning leading global health organisations, public health bodies and policy makers who are best placed to apply the findings of the Global Encephalitis Review, building a global response that will see a reduction in the devastation so often wreaked by encephalitis, and result in improved prevention, diagnosis and treatment for patients affected by the condition wherever they live in the world.

<sup>&</sup>lt;sup>1</sup> Venkatesan A, Michael BD, Probasco JC, Geocadin RG, Solomon T. Acute encephalitis in immunocompetent adults. Lancet. 2019 Feb 16;393(10172):702-716. doi: 10.1016/S0140-6736(18)32526-1. Epub 2019 Feb 14. PMID: 30782344.

<sup>&</sup>lt;sup>2</sup> Easton, A. What is encephalitis? The Biomedical Scientist. Published online 3 June 2019: <a href="https://thebiomedicalscientist.net/science/what-encephalitis">https://thebiomedicalscientist.net/science/what-encephalitis</a>

<sup>&</sup>lt;sup>3</sup> <a href="https://www.encephalitis.info/who-partnership/">https://www.encephalitis.info/who-partnership/</a>

<sup>&</sup>lt;sup>4</sup> https://www.who.int/news/item/12-01-2022-draft-intersectoral-global-action-plan-on-epilepsy-and-other-neurological-disorders-2022-2031

<sup>&</sup>lt;sup>5</sup> The Lancet Neurology. A decisive year for the neurological community. Lancet Neurol. 2022 Feb;21(2):103. doi: 10.1016/S1474-4422(22)00001-1. PMID: 35065025.

<sup>&</sup>lt;sup>6</sup> Venkatesan P. Defeating meningitis by 2030: the WHO roadmap. Lancet Infect Dis. 2021 Dec;21(12):1635. doi: 10.1016/S1473-3099(21)00712-X. PMID: 34838228.

The Encephalitis Society knows only too well the importance of changing the global encephalitis landscape and it is timely that the launch of this new initiative coincides with the Code Red theme of World Encephalitis Day 2022 (22<sup>nd</sup> February).

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